ABSTRACT

In a belt type continuously variable transmission that comprises a variable width drive pulley 5, a variable width driven pulley 8, and a metal V belt 7, which is disposed around the drive and driven pulleys 5 and 8, the contour of the surfaces (V faces 11) in contact with the metal V belt 7 in the cross-sectional view through the axes of the drive and driven pulleys 5 and 8 is an arc that has a first radius of curvature rp and is convex to the metal V belt 7, and the contour of the surfaces (V faces 46) in contact with these two pulleys 5 and 8 in the cross-sectional view perpendicular to the longitudinal direction of the metal V belt 7 is an arc that has a second radius of curvature re and is convex to the drive and driven pulleys 5 and 8. In this transmission, the contact point moving on the contact surfaces of the drive and driven pulleys 5 and 8 and the metal V belt 7 for a speed ratio change satisfies an equation of $\Delta le/\Delta lp = re/rp$ where the Δlp is a distance (contact length) over which the contact point migrates in the cross-sectional view through the axes of the pulleys 5 and 8, and the Δle is a distance (contact length) over which the contact point migrates in the cross-sectional view perpendicular to the longitudinal direction of the metal V belt 7.